

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

File No. : BZ-890816AC

Call Sign : WRAD

LICENSEE:

WRAD BROADCASTING COMPANY

1. Community of License : Radford, VA
U.S Hwy. 11, 0.5 km N.W. of
2. Transmitter location : Radford City limits.

North latitude : 37° 08' 35.4"
West longitude : 80° 34' 38.4"

6. Antenna and ground system: Attached

3. Transmitter(s): Type Accepted. (See Sections 73.1660, 73.1665 and 73.1670 of the Commission's rules)

4. Main Studio location: (See Section 73.1125)

US Highway 11, 0.5 km N.W. of
Radford City limits

5. Remote control location: - - -

7. Obstruction marking and lighting specifications - FCC Form 715, paragraphs: 1, 3, 11 and 21.

8. Frequency : 1460 kHz

9. Nominal power (kW) : 5.0 Day 0.5 Night

Antenna input power (kW):

5.0 Day ☒ Non-directional antenna: current 5.50 amperes; resistance 165 ohms.
☐ Directional antenna

0.54 Night ☐ Non-directional antenna: current 3.29 amperes; resistance 50.0 ohms.
☒ Directional antenna

10. Hours of operation: Specified in BR-2487-

11. Conditions :

4/4/90 : This supersedes authorization as of same date to correct Description of Directional Antenna System.

Subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts, Treaties, and Commission rules made thereunder, and further subject to conditions set forth in this license,¹ the LICENSEE is hereby authorized to use and operate the radio transmitting apparatus herein described for the purpose of broadcasting for the term ending 3 AM. Local Time

October 1, 1995

The Commission reserves the right during said license period of terminating this license or making effective any change, or modification of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rules of the Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing which has been designated but not held, prior to the commencement of this license period.

The license is issued on the licensee's representation that the statements contained in the licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934, as amended.



FEB 13 1990

June 1980

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Date

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1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

No. and Type of Elements: Two (2) vertical, guyed, series-excited, steel radiators of uniform cross section, with a FM Broadcast Antennas side-mounted near the top of the South (No. 1) tower. Theoretical RMS. 202.13 mV/m/km. Augmented RMS. 212.79 mV/m/km. Q = 10.0, Night.

Height above Insulators: 61 m (107°)

Overall Height: 62.5 m

Spacing and Orientation: Spaced 196° on a line bearing 7° true.

Non-Directional Antenna: South tower (No. 1) with North tower open. Theoretical efficiency 313.82 mV/m/km @ 1 kw (Day.)

Ground System consists of 120 equally spaced, buried copper radials 34.8 m to 61.0 m in length plus a 14.6 m by 14.6 m ground screen about the base of the South (No. 1) tower; 120 equally spaced, buried, copper radials 25.9 m to 61 m in length plus a 7.3 m by 7.3 m ground screen about the base of the North (No. 2) Tower. Radials bonded to copper strap around perimeter of farmyard.

2. THEORETICAL SPECIFICATIONS

	Tower	South (1)	North (2)
Phasing:	Night	0°	+48°
Field Ratio:	Night	1.0	0.9

3. OPERATING SPECIFICATIONS

Phase Indication*:

	Night	0°	168°
Antenna Base Current Ratio	Night	1.0	1.043
Antenna Monitor Sample	Night	1.0	0.860

* As indicated by Potomac AM-19 (204) Antenna Monitor.

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DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINT:

Direction of 7 degree true North. From WRAD transmitter proceed northwest on U.S. Route 11.02 mile to State Road 600. Turn right on State Road 600 and proceed 0.5 mile to traffic light and State Highway 114. Turn right (East) on Route 114 0.45 mile to a brick house to the north. Turn north into drive of brick house and go onto yard. Climb board fence at rear of yard. Point is 15 paces north of fence opposite cherry tree to south of point. This is point No. 3 and is 0.78 miles from the array. The field intensity measured at this point should not exceed 131.7 mV/m.

Direction of 55 degree true North. Distance from array 1.19 miles. Starting at WRAD's site, proceed north on U.S. Highway #11 0.2 mile to intersection. Turn right at intersection and proceed 0.48 mile to intersection of State Road #114. Turn right on State Road #114 and proceed northeast 1.1 miles to intersection on right. Turn right and drive south 0.2 mile to fork in road. Turn on left fork of road and proceed approximately 0.05 mile to farm entrance road on left. Monitoring Point is located in center of black top road, adjacent to farm entrance road. This is point No. 10 and is 1.11 miles from the array. The field intensity measured at this point should not exceed 11.6 mV/m.

Direction of 187 degree true North. From the WRAD transmitter proceed southeast on U.S. Route 11 0.6 mile to first street in Radford, Virginia. Turn right (southwest) on first street and proceed 1.5 miles to Pendleton Street. Turn left (east) on Pendleton Street 0.4 mile to Seventh Street. Turn right (south) on Seventh Street 0.15 mile to a cement block house on left (east). Walk east between cement block and brick house, through a gate in the fence to point. Point is located in field at wood block 45 paces south of gate in white wood fence. This is point No. 10 and is 1.75 miles from the array. The field intensity measured at this point should not exceed 16.3 mV/m.

Direction of 219 degree true North. From WRAD transmitter proceed southeast on U.S. Route 11 0.2 mile to State Road 626. Turn right (southwest) on 626 and proceed 4.1 miles to "STOP" sign at State Road 611. Turn right (west) on State Road 611, proceed 1.5 miles to State Road 615. Turn right (north) on State Road 615, proceed 0.2 mile to the entrance to Pearl Annie Smith farm. Turn right into Smith farm. Proceed 0.05 mile to the gate in the fence to the south of the house. Point is opposite the house, 150 feet south of the house, through the gate. This is point No. 17 and is 4.51 miles from the array. The field intensity measured at this point should not exceed 6.6 mV/m.